PROGRAMME SPECIFICATION

Part 1: Basic Data	
Awarding Institution	UWE
Teaching Institution	UWE
Delivery Location	UWE
Study abroad / Exchange / Credit recognition	No
Faculty responsible for programme	Environment and Technology
Department responsible for programme	Computer Science and Creative Technologies
Modular Scheme Title	Environment and Technology
Professional Statutory or Regulatory Body Links	JAMES – APRS Accreditation
Highest Award Title	BSc(Hons) Creative Music Technology
Default Award Title	
Fall-back Award Title	BSc Creative Technologies
Interim Award Titles	BSc Creative Music Technology Dip HE Creative Music Technology Cert HE Creative Music Technology
UWE Progression Route	
Mode(s) of Delivery	FT
Codes	**UCAS:WJ39** **JACS:** **ISIS2:** **HESA:**
Relevant QAA Subject Benchmark Statements	Engineering
First CAP Approval Date	June 2013 — Valid from — September 2012
Revision CAP Approval Date	March 2015 v1.2 July 2015 v1.3 Feb 2016 v2 Jan 2017 v3 Jan 2019 v4 — Valid from — Sep 2019
Version	4
Review Date	

Part 2: Educational Aims of the Programme

The programme in Creative Music Technology has the following general aims:

- To produce graduates prepared for careers as individuals or within organisations in which technology is applied to the creation or distribution of music and sound within the creative industries.

Part 2: Educational Aims of the Programme

- To provide students with an industry-focused learning experience, which will allow them to develop their musical and production skills in a professional context, and which addresses their academic, professional, social and cultural development.

The programme in Creative Music Technology has the following specific aims:

- To award an honours degree in Creative Music Technology and produce graduates who have the ability to make a contribution to the creative industries as individuals or within companies engaged in the use, design and production of music or music systems, including film, theatre and other arts.

- To develop students' ability to work creatively through both composition.

- To educate students in the use and application of technology in the creative and performance arts – specifically audio and sound engineering.

- To link the design and engineering of music systems with appropriate understanding and theoretical underpinning, especially in the use of computer technology in a musical context.

In addition to the general and specific aims stated above, the option modules have been selected to allow students to tailor their course to suit their specific interests and chosen career path.

Programme requirements for the purposes of the Higher Education Achievement Record (HEAR)
N/A

Part 3: Learning Outcomes of the Programme

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas:

Learning Outcomes	Teaching, Learning and Assessment Strategies
A Knowledge and Understanding	
A Having successfully completed this programme, students will be able to:	**Teaching/learning methods and strategies:** Throughout, the learner is encouraged to undertake independent reading both to supplement and consolidate what is being taught and learned and to broaden their individual knowledge and understanding of the subject. Independent use of the recording studio is encouraged throughout the degree and is a requirement for UFCFG4-30-2 Audio Recording. This independence is developed first in UFCFC4-30-1 Audio Engineering where fundamental knowledge and understanding is gained through specific guided tasks. Computer-based tasks are tackled in a similar manner whereby practical sessions in the earlier years of the degree provided specific assistance with clearly defined tasks. Later on in the degree this transitions to encourage leaners to seek out solutions using a variety of sources. Level 3 options are designed to promote awareness of the wide range of professional and employment opportunities for all music technology graduates.

Part 3: Learning Outcomes of the Programme

1. Describe engineering processes and applications with particular reference to audio systems using real and abstract quantities. 2. Explain the application of computing and other digital technologies to a range of audio-related and music-related practices. 3. Identify symbols, notation and language used in conventional music practice. 4. Recognise musical instruments both visually and aurally and identify a range of musical genres from the Western Art tradition and from contemporary music. 5. Identify applications of music and audio technologies in other domains including moving image and multimedia contexts.	**Assessment**: The outcomes are assessed in core modules through a variety of methods. Where appropriate examinations are used, principally to test knowledge of theoretical concepts. Coursework is used extensively and offers the opportunity for students to demonstrate their understanding in a number of ways including the writing up of laboratory investigations and recording projects and more general essay-type activities.

B Intellectual Skills

B Having successfully completed this programme, students will be able to:	**Teaching/learning methods and strategies:** Intellectual skills are developed through tutorials and practical sessions that stimulate students' critical, analytical and problem-solving abilities. Computer programming skills are developed to support a means of exercising students' problem-solving skills in individual and group-based activities. During music studio sessions the students have the opportunity to rehearse their problem-solving and analytical skills by appraising a range of possible solutions to modern recording problems and determining the most appropriate technique for the creation of professional sound recordings. Business skills are developed and embedded across a range of modules rather than being delivered through dedicated modules. This is due to the wide range of business destinations in which our graduates could find themselves. For example, business concerns in the music industry are developed in music recording modules and the business of software engineering is covering in the computer programming related modules.

Part 3: Learning Outcomes of the Programme

1. Apply logical thinking and the use of symbolic languages to evaluate the relationships between real and abstract quantities in the context of problems that arise in engineering. 2. Develop problem-solving strategies in musical and technical contexts. 3. Interpret acoustic and electrical theory in the context of the recording studio, performance events and other relevant scenarios. 4. Evaluate the application of business, marketing and other professional practice to a range of products and vocations including the creative industries, product development and software engineering.	**Assessment**: Intellectual skills 1 and 2 are assessed mainly through coursework and examination throughout the award. Intellectual skills 3 and 4 are assessed by coursework and examination mainly within UFCFG4-30-2 Audio Recording as well as UFCFC4-30-1 Audio Engineering. The project module, UFCF96-45-3 Music Technology Project, with its assessment based on a substantial report and significant focused practical activity, further develops intellectual skills, particularly skill 2

C Subject, Professional and Practical Skills

C Having successfully completed this programme, students will be able to: 1. Manage the use of computing and recording studio technologies in the creation of music and audio recordings and other products. 2. Analyse sound and music both aurally and through technical processes using a range of representations.	**Teaching/learning methods and strategies:** The ability to work with music systems in a professional practical manner and the application of mathematical techniques to problems associated with music systems are major aims of the award. Tutorials consolidate material introduced in the lecture environment, which together with computer laboratory practice using appropriate software, facilitate interpretation of theory to practical problems. Students are encouraged to work to professional timescales using footage sourced from professional broadcasters, and work with a range of industry-standard hardware, software and middleware systems to provide a professional context to their work. As discussed above, independent learning is developed across the three levels of undergraduate study broadly through project-based coursework tasks. Analysis of the physics and acoustics of musical instruments applied to audio recording is also developed through a practical and research based approach in UFCFN5-15-3 Instrument Recording Investigation. Throughout the degree, listening skills are developed through lectures, tutorials and practical sessions. These listening skills range from musical skills developed at Level 1 in UFCFML-15-1 Exploring Music which introduces or consolidates students' musical skills. Listening is embedded in all modules to evaluate the results of all audio-based activities from music recording to post-production environments in UFCFD4-15-3 Audio Post Production.

Part 3: Learning Outcomes of the Programme

	Assessment:
	The possession of these skills is demonstrated by the development of practical studio and laboratory work, coursework, presentations and examinations. The practical nature of the skills to be acquired means that some are specifically addressed by particular modules.

D Transferable Skills and other attributes

D	**Teaching/learning methods and strategies:**
1. Communication skills: to communicate orally or in writing. 2. Self-management skills: to manage one's own time; to meet deadlines; to work with others. 3. IT skills in context: to use software tools in the context of application development. 4. Logical reasoning and problem-solving skills: To undertake analysis and interpretation of information in the context of the computing and technology and music disciplines. 5. Problem formulation: To express problems in appropriate notations. 6. Progression to independent learning: To gain experience of, and to develop skills in, learning independently of structured class work. For example, to develop the ability to use on-line facilities to further self-study. 7. Comprehension of professional literature: to read and to use literature sources appropriate to the discipline to support learning activities.	1. Communication skills are developed through a variety of methods and strategies including the following: • Students maintain laboratory log books • Students participate in electronic conferences, workshops, and groupwork sessions. • Students participate in discussion tutorials • Students present research topic findings in tutorials • Students participate in individual tutorials • Students respond to feedback both formative and summative 2. Self-management skills are developed through a variety of methods and strategies including the following: • Students conduct self-managed practical work • Students participate in practically-oriented tutorial laboratory sessions • Students work through practical work-sheets in teams • Students participate in electronic group-working tutorials 3.Students arriving on this programme tend already to be fairly fluent in IT skills. This is developed further within the context of the recording studio which makes heavy use of computing software as a core skill for the programme and in the following ways: • Students conduct self-managed practical work • Students participate in experimental investigation tutorials • Students work through practical work-sheets in teams • Students make use of online teaching materials • Students use a range of development and audio tools, methods, and packages • Students are encouraged to practice programming to extend their skills • Students make sustained use of the internet

Part 3: Learning Outcomes of the Programme	
	• Students submit coursework via online submission systems and receive feedback via similar routes • Students undertake computer-based exams
	4. Logical reasoning skills are developed through a variety of methods and strategies including the following: • Case-Studies are used to explore design issues with students • Students practice design and programming • Students sketch designs of larger systems • Students plan and execute recording sessions and deal with unexpected problems that arise during time-critical activities
	5. Problem formulation skills are developed through a variety of methods and strategies including the following: • Students practice design and programming • Students develop recording session plans • Students produce stage plans for live events
	6. Progression to independent learning is developed through a variety of methods and strategies including the following: • Students are encouraged to practice all practical activities within the programme to extend their skills • Students are encouraged to research relevant topics • Students are encouraged to use the library, the internet and other online facilities to discover information and broaden knowledge • Students are encouraged to articulate and reflect upon their own ideas and experiences • Students negotiate the content and structure of their individual projects with tutors
	7. Comprehension of professional literature is developed through a variety of methods and strategies including the following: • Students are encouraged to access online material • Material is recommended to the students in module syllabi and by tutors • Students are required to research and refer to appropriate literature in assignments and the individual project
	Assessment: 1. Communication skills are assessed mainly by examination, but also by in-class tests, essays, presentations and poster presentations.

Part 3: Learning Outcomes of the Programme	
	2. The other skills are assessed through a number of similar instruments including the following: • Individual and group projects • Practical assignments • Portfolio of exercises 3. In addition self-management skills are assessed by both peers and tutors through GDP sessions and generally throughout the course.

Part 4: Student Learning and Student Support

Teaching and learning strategies to enable learning outcomes to be achieved and demonstrated

Pastoral Support Pastoral care is provided through the University-wide Student Advisers, a team of staff who provide comprehensive, full-time student support service on a drop-in basis or by appointment. Advisers are trained to provide advice on matters commonly of concern, including regulatory and other matters; the Adviser will, when necessary, advise the student to seek advice to from other professional services including the University's Student Services Department or from members of academic staff.

Independent Study
Many modules require students to carry out independent study, such as research for projects and coursework assignments, and a full range of facilities are available to help students with these. The philosophy is accordingly to offer students both guided support and opportunities for independent study. Guided support, mainly in the form of timetabled sessions, takes the form of lectures, tutorials, seminars and practical laboratory sessions. Students are expected to attend all sessions on their timetable, and this is especially important because of the high content of practical work in the programme.

This route to independent learning is developed across the three levels of undergraduate study. Initially, learners are provided with specific texts and sources to provide support for lectures, tutorials, practical sessions, assignments and exams. This approach is then developed to guide students to select appropriate sources and texts for a particular task. This culminates in UFCF96-45-3 Music Technology Project where learners must first select an appropriate project task. Subsequently, they research the necessary texts and other resources required to undertake the project, and plan a significant portion of time dedicated to this project.

The development of independent study will also be assisted by the nature of the support offered in other individual modules. Typically, module leaders will provide a plan for the module indicating the activities to be carried out and the forms of learning to be undertaken during the delivery of the module, with a view to encouraging students to plan ahead and to take responsibility for managing their time and resources. This responsibility is generally weighted towards the module teaching team in the early part of the course and shift towards the student as they progress to graduation.

Computing Facilities The Faculty offers a specialised computing facility alongside the general University provisions. There are multiple computing laboratories of 20 plus seats all running Macintosh based systems required for this program. The specialist laboratories are augmented with software resources and hardware equipment necessary for the delivery of the modules. One of the most popular areas within the Faculty is the Open Access laboratory. This area is never timetabled and gives students the opportunity to access machines at all times

Part 4: Student Learning and Student Support

during opening hours. This is a mixed environment consisting of Macintosh, PCs and Unix workstations.

Professional Contexts The teaching staff on the programme are drawn from a range of backgrounds to support the varied activities undertaken within the programme. These included those with pure academic backgrounds, research and professional practitioners from audio-related industries. This balance enhances the student experience and employability prospects.

Description of the teaching resources provided for students
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Part 5: Assessment

A: Approved to University Regulations and Procedures

Part 6: Programme Structure

This structure diagram demonstrates the student journey from Entry through to Graduation for a typical **full time student**, including: level and credit requirements, interim award requirements, module diet, including compulsory and optional modules

ENTRY			
	Year 1	Compulsory Modules UFCFML-15-1 Exploring Music UFCFPL-15-1 Introduction to Composition UFCFF4-30-1 Introductory Audio Programming UFCFH4-30-1 Audio Technology UFCFC4-30-1 Audio Engineering	Interim Awards Cert HE Creative Music Techology
	Year 2	Compulsory Modules UFCFT3-30-2 Advanced Composition Three modules from five options UFCFRL-30-2 Research and Practice in Music Technology UFCFG4-30-2 Audio Recording UFCFE4-30-2 Audio Process Design and Implementation UFCFA4-30-2 Applied Audio Systems UFCF9G-30-2 Mobile and Physical Computing	Interim Awards Dip HE Creative Music Techology
		Year Out: Students may optionally complete a placement year. For students on placement, there is an opportunity to complete a professional practice module and be awarded 15 level 3 credits. The professional experience module is shown in the option list for year 3 but is actually completed during the year out.	
	Year 3	Compulsory Modules UFCF96-45-3 Music Technology Project At least two Modules selected from: UFCFV3-15-3 Advanced Performance Recital UFCFL6-15-3 Sonic Art UFCF9H-15-3 Advanced Composition II Optional Modules* UFCFE6-15-3 Professional Experience OR UFCFWJ-15-3 International Experience OR UFCFVJ-15-3 Professional Development	Interim Awards BSc Creative Music Techology

		UFCFV5-15-3	Live Sound	
		UFCFD4-15-3	Audio Post Production	
		UFCFN5-15-3	Instrument Recording Investigation	
		UFCFA6-15-3	Audio For Game	
		UFCF94-15-3	Software Development for Audio	
		UFCFE5-15-3	Game Audio Programming	
		UFCFTJ-15-3	Architectural Acoustics	

GRADUATION

*All three modules may be selected from the three 'compulsory option modules' in addition to an appropriate number of Optional Modules.

Part 7: Entry Requirements

The University's Standard Entry Requirements apply with the following additions:

(a) evidence of achievement in Mathematics at GCSE Grade C or equivalent
(b) an A level or equivalent in a scientific or technological subject.
(c) an A level or equivalent in Music or Grade 8 level musical performance

Tariff points as appropriate for the year of entry - up to date requirements are available through the [courses database](#).

Part 8: Reference Points and Benchmarks

QAA subject benchmark statements
The Audio Music Technology programme falls within the cognate area of the QAA Engineering benchmark. The Engineering Benchmark Statement contains statements of the standards expected of graduates at threshold levels. Graduates of this programme will be able to meet the required standards to meet the benchmark. In addition, some elements of both the Computing and the Music benchmark statements have been influential such as Musical performance and composition (Sections 3.8 and 3.9 Music) and Music technology and acoustics (Sections 3.14 and 3.15 Music) and Programming fundamentals (Appendix B Computing).

University strategies and policies
The development of this programme reflects well institutional policies and is fully consistent with the University's commitment to 'make a positive difference to our students, business and society'.

This programme supports the University's Strategic Partnership themes as represented by the INSPIRE acronym:
  • Innovation
  • Nurturing Talent
  • Student Experience
  • Participation
  • Internationalisation
  • Research
  • Exchange

This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of individual modules can be found in module specifications, available on the University's website.